The International Journal of Indian Psychology ISSN 2348-5396 (Online) | ISSN: 2349-3429 (Print) Volume 11, Issue 1, January- March, 2023 DIP: 18.01.186.20231101, ODOI: 10.25215/1101.186 https://www.ijip.in



Research Paper

Pro-Social Behaviour: Biological, Moral and Emotional

Perspectives

Sanya Kapur¹*, Lavanya Parihar², Srija Kaistha³

ABSTRACT

Prosocial behaviour is studied not just in psychology but also in economics, sociology, biology, and other fields. It was realised that a person's prosocial behaviour is crucial since it serves as the foundation for social involvement in the outer world. The goal of this review was to better understand the various viewpoints on prosocial behaviour. The current research demonstrates that prosocial behaviour may be understood using three broad perspectives. The studies here, highlight the biological roots of prosocial behaviour and demonstrate that it is not limited to humans. It is also seen that, Prosocial behaviour can have emotional as well as moral roots, such as moral reasoning and social learning. The review can be used for understanding these varied viewpoints, in order to identify and adapt methods of strengthening such behavior and conduct further research.

Keywords: Perspectives, Pro social behaviour

T T hat is Prosocial Behaviour?

Prosocial behaviour, which is a type of moral behaviour (Fabes et al., 1999), is critical for sustaining strong social interactions and improving social adjustment. Prosocial conduct (helping, collaborating, soothing, sharing, and donating) was characterised as an activity in which people benefit others (Eisenberg, 1982). (Eisenberg and Fabes, 1998; Greener and Crick, 1999). Such actions are taken willingly with the purpose of assisting others (Eisenberg & Fabes, 1998).

This definition emphasizes on the possible advantages to the pro-social behaviour performer. Nonetheless, actions that assist others but have a main purpose of self-advantage (e.g., a cooperative established to gain a shared resource) are not regarded as pro-social. Volunteering, sharing toys or food with friends; instrumental help (e.g., assisting a peer with school assignments); costly help (e.g., risking one's own life to save others); and emotionally supporting others in distress (e.g., comforting a peer after a disappointing experience or caring for a person who is ill) are typical examples.

¹MA Clinical Psychology, Amity Institute of Psychology and Allied Sciences, Amity University Noida, India ²MA Clinical Psychology, Amity Institute of Psychology and Allied Sciences, Amity University Noida, India ³MA Clinical Psychology, Amity Institute of Psychology and Allied Sciences, Amity University Noida, India *<u>Corresponding Author</u>

Received: December 23, 2022; March 27, 2023; Accepted: March 31, 2023

^{© 2023,} Kapur, S., Parihar, L. & Kaistha, S.; licensee IJIP. This is an Open Access Research distributed under the terms of the Creative Commons Attribution License (www.creativecommons.org/licenses/by/2.0), which permits unrestricted use, distribution, and reproduction in any Medium, provided the original work is properly cited.

Definitions and examples

Prosocial behaviour refers to "voluntary actions that are intended to help or benefit another individual or group of individuals" (Eisenberg and Mussen 1989, 3). This definition focuses on the outcomes of a doer's acts rather than the motives for those actions. These acts cover a wide range of activities such as sharing, soothing, rescuing, and assisting. Though prosocial conduct and altruism are sometimes mistaken, they are not the same thing. Prosocial conduct is a pattern of activity, whereas altruism is the urge to serve others without concern for how the action would benefit oneself. When an individual makes an anonymous contribution to a person, organisation, or institution without any resultant recognition, political or economic advantage, this is an example of altruism; the donation is the prosocial activity, and the altruism is what inspires the doer to action.

Examples of prosocial conduct include:

- a person contributing money to charity despite receiving no physical gain from doing so
- a person stopping to assist a stranded motorist.
- a monkey grooming another monkey.
- a dog playing more gently with pups than he/she plays with adult dogs.

Origins of Prosocial Behaviour

The fact that other animals exhibit prosocial conduct in addition to humans suggests that altruistic behaviour may have an earlier evolutionary basis and may aid in a species or individual's survival. As children and relatives can pass on a person's genetic heritage, some scientists have hypothesised that animals, including people, are more inclined to display prosocial behaviour toward these individuals. Other researchers emphasise the significance of reciprocal altruism, which is when someone acts prosocially with the expectation of subsequent benefit. A monkey who grooms a wounded companion may do so with the understanding that the companion will be more likely to repay the favour if the monkey is ever wounded. Nevertheless, there have been countless cases of apparently the act of an animal helping another animal who is not connected to it and cannot return the favour.

A large portion of early development is devoted to assisting youngsters in developing the ethical and social attitudes appropriate to their cultures. Parents frequently serve as positive role models for their children. All cultures set standards for how people should regard one another, yet what counts as prosocial behaviour in one society might not in another. For instance, in the United States, it is customary to shake hands and make eye contact with strangers, yet in other parts of the world, these actions could be seen as confrontational. Different viewpoints on how to interpret prosocial behaviour in a person are derived from these varied origins. In this essay, we cover the various causes of prosocial behaviour and examine its various theoretical interpretations from the moral, emotional, and biological viewpoints.

REVIEW OF LITERATURE

Referred studies from the years 1971 to 2012 were subjected to a literature review. Using Google Scholar, Research Gate, NCBI, and other resources, studies on prosocial behaviour, theories, viewpoints, and helping behaviour were reviewed.

Theoretical Background.

Moral Perspectives of Prosocial Behaviours.

Morality involves cognitive, emotional, and behavioural components," claims **Shaffer (2009).** While the behavioural aspect of morality encompasses both prosocial and antisocial behaviours, the affective aspect of morality includes moral feelings like empathy, pity, and guilt. The cognitive component of morality is a generic classification for Piaget and Kohlberg's views on moral development. Due to the fact that these theories frequently focus on how people think about moral decisions rather than how people act in specific circumstances.

But according to **Helwig and Turiel (2011)**, moral thinking has both moral and social dimensions. In contrast to the social domain, which comprises conventional and social standards, the moral domain, according to the moral domain theory, encompasses ethical dilemmas, moral violations, and universal moral rules. For instance, theft may be regarded as a moral violation and is associated with the moral realm. In contrast, giving up your seat to an elderly person in a packed bus is a social act. Prosocial conduct is therefore seen to be tied to both the moral and social domains, whereas traditional theories of moral growth often deal with ethical difficulties and the moral domain.

Children pick up prosocial behaviours and moral principles by watching how their parents and classmates act, claims the social learning hypothesis. For instance, **Holmgren, Eisenberg, and Fabes (1998)** discovered that children who saw giving models while playing were more likely to assist their peers than those who watched selfish models. Children not only learn through observation, but also through reciprocal determinism, which consists of reciprocal interactions between person, environment, and behaviour, in accordance with Bandura (1978). Positive reinforcement is therefore given when the behaviour is deemed appropriate for the moral norms of the environment, increasing the likelihood that the youngster would act in this manner.

Similar to this, **Kochanska et al. (2002)** discovered that parental feedback, such as outlining why their child's conduct is appropriate or bad, helped prosocial behaviours emerge in 22- to 45-month-old children. In addition, it was shown that teenagers' volunteering tendencies were more comparable to their parents' than to other parents (Keith et al., 1990). Prosocial habits, however, come from seeing other adults in addition to the parents (**Williamson, Donohue, & Tully, 2013**).

Environmental variables influence moral actions in addition to seeing prosocial role models or acting morally according to one's parents. According to **Bronfenbrenner's (1979)** ecological systems theory, a person's conduct is influenced by the macro system that corresponds to their cultural values. **Romano et al. (2005)** discovered that the prosocial conduct of ghetto children was associated with both poverty and their parents' animosity.

As was already noted, the social domain of morality links moral and prosocial conduct to social learning. However, it was shown that the prosocial actions could only be partially explained by **Piaget and Kohlberg's** cognitive conceptions of morality. These theories' emphasis on moral reasoning in terms of norms, authority, and regulations appeared to be one of the reasons. Thus, prosocial acts and prosocial moral thinking were refuted by **Eisenberg et al. (1979)**, who developed difficulties connected to prosocial activities. Children that are in the hedonistic period are more egocentric and will only assist their friends if it would benefit them. Children in the needs-oriented phase assist others because they prioritise their own

needs over those of others. Children who are in the approval-focused phase serve others because they believe that doing so will increase their chances of receiving others' approval. When children in the emphatic phase are unable to respond to the needs of others, they feel guilty and offer assistance.

Children assist because they have internalised moral principles throughout the internalisation phase (Eisenberg, Lennon, & Roth, 1983). Children's moral thinking is conceptualised in these stages, while Carlo, Eisenberg, and Knight questioned the existence of prosocial moral reasoning in adolescents (1992). Additionally, Eisenberg et al. (2014) discovered that hedonistic reasoning started to decline in young adulthood. It is possible to link sophisticated reasoning to adolescent brain development. Prefrontal cortex undergoes changes during adolescence, including synaptic pruning and myelination, which are associated with the growth of central executive functions, planning, and emotional regulation (Paus, 2005).

In a similar vein, Decety, Michalska, and Kinzler (2012) discovered that complex reasoning was associated with the maturation of the prefrontal cortex and amygdala connection functions from childhood to young adulthood. Helpful behaviours were linked to prosocial moral reasoning that was more advanced (Eisenberg et al., 2014). Similar to this, moral and prosocial behaviour is linked to moral identity in addition to moral reasoning (Hardy, 2006). As a representation of integrated moral principles in a person's self-schema, moral identity is disputed (Johnston & Krettenauer, 2011). As a result, moral identity is thought to control a person's moral behaviour. When one's self-schema centres on moral principles, the person is motivated to act in accordance with this self-schema. According to Blasi (2004), a person's personality includes their intention to act morally. Therefore, morality cannot be refuted by ignoring a person's personality traits. Contextual elements like circumstances and behavioural regulation abilities are the other element of moral behaviour in addition to personality. Additionally, he made the argument that morality has an active component; as a result, moral reasoning involves both emotions and cognitive processes. Similar to this, Haidt (2001) argued that intuition plays a role in moral decision-making. Therefore, it can be said that when we decide to help, this process contains not only cognitive aspects but also emotion, intuitions, etc.

The qualities of being helpful, compassionate, kind, and trustworthy are categorised as being connected to moral identity. For instance, a person must incorporate these attributes into their self-schema in order to assist others. Thus, the process of internalisation entails concentrating these features within the self-schema, while the process of symbolization entails projecting these traits through action. According to studies, internalising moral identity features is linked to prosocial behaviour throughout adolescence and maturity (Aquino & Reed, 2002; Hardy, Bean, & Olsen, 2015; Hart & Fegley, 1995).

In conclusion, morality is a combination of emotive, behavioural, and cognitive processes. Similar to how moral thinking, advanced perspective-taking skills, moral identity, and internalisation of moral principles are associated with the evolution of prosocial behaviour.

Emotional Perspectives of Prosocial Behaviours

Frank (1988), studied moral and social emotions are crucial for a healthy society. According to the "Commitment" problem, people must act prosocially in order to resolve conflicts that arise when their selfish motivations collide with social expectations and norms. Moral feelings like guilt and shame motivate people to act in such ways because they want to fit in with

© The International Journal of Indian Psychology, ISSN 2348-5396 (e) | ISSN: 2349-3429 (p) | 1849

societal standards and values and do not want to feel these emotions. Therefore, people rebuild "commitment" in society with the aid of moral feelings (Bierho, 2002). Because they include a process of self- and other-evaluation, Haidt (2003) noted that moral ideals are particularly tied to sentiments of guilt and shame. Prosocial emotional processes are typically studied in terms of sympathy, empathy, and emotional control (Eisenberg, 2000). This review looks at how guilt feelings affect prosocial behaviour. Since guilt feelings often involve evaluating one's own improper behaviour, they might result from prosocial behaviour toward others because it gives the offender a chance to make amends. Similar to this, "Commitment Problem" proposes that people engage in prosocial behaviour and suppress emotions of guilt in an effort to safeguard society.

In addition to being categorised as self-conscious emotions, guilt feelings are moral emotions. Basic emotions are distinguished from self-conscious emotions by Tracy, Robins, and Tangney (2007). Emotions of self-consciousness need self-evaluation. Emotions of selfconsciousness have uses, such as fostering positive relationships with others. Due to the opportunity for restitution that guilt feelings provide, maintaining good connections with others is also aided by them (Tracy & Robins, 2004). Additionally, self-conscious emotions are distinct from fundamental emotions in that they involve self-reflection and judgements of oneself and others. Infants as young as nine months old exhibit basic feelings like fear and grief, but it is not until they are 18 months old when self-conscious emotions may be seen (Lewis, Sullivan, Stranger, & Weiss, 1989). As was previously noted, self-conscious emotions are linked to the control of social behaviour since they offer feedback on the person's behaviour. According to Tangney et al. (1996), when a person's behaviour conflicts with moral standards, emotions of guilt develop, and the person then feels obligated to make amends. In a similar vein, it has been discovered that prosocial behaviour and guilt sentiments are connected (De Hooge, 2008; De Hooge, Zeelenberg and Breugelmans, 2007; Ketelaar and Au, 2003).

According to Baumeister, Stilwell, and Heatherton (2004), when an individual's behaviour violates moral standards, guilt feelings give the individual the opportunity to control social interactions by making an apology for the behaviour. De Hooge (2012) discovered that even when someone else prevents a person from doing harm, they may still feel guilty. Eliminating guilt and controlling emotions are more crucial for the person than preventing harm to others. Even though people still feel bad in these situations. In this circumstance, it could be argued that the person has less responsibility, hence they are not required to make up for it by acting prosocially. Additionally, a person's perceived duty determines how they will aid in the future. Frank (1988) argued that moral feelings assist people preserve their social standing, but the Three Prisoner's Dilemma Game is a conundrum used in decision-making analysis in which two players must decide whether to work together or compete to achieve the best result.was discovered that when the injury was caused by someone else, helpful behaviour decreased.

In conclusion, research has shown that when people feel guilty, they strive to make up for it by acting prosocially and cooperating more. However, it is uncertain if someone who feels guilty about something will act in a prosocial manner.

Biological Perspectives of Prosocial Behaviours

Darwin (1871) questioned the concept of altruism because he believed that it was a behaviour that would be difficult for natural selection to account for in the context of evolution. But after seeing how ants sacrificed themselves for others, he had a different perspective. Similar to Peter Kropotkin, who investigated cooperative and helpful behaviours in non-human animals

© The International Journal of Indian Psychology, ISSN 2348-5396 (e) | ISSN: 2349-3429 (p) | 1850

in 1902, his observations were compiled in a book titled "Mutual Aid." His discoveries shed light on the fact that there is cooperation among species in addition to interspecies conflict (Dugatkin, 1997). Biologists up until the middle of the 20th century conducted observations and investigated altruism. But explaining the evolutionary underpinnings of those behaviours was a challenge. In order to illustrate the connection between kinship and altruistic behaviour, Hamilton (1964) created a model. According to researchers, the likelihood of helping behaviour rises when members' genetic make-ups are similar because it lowers the actual cost of helping behaviour (Gorrell, McAdam, Coltman, Humphries, & Boutin, 2010; Warneken ve Tomasello, 2009).

The concept of reciprocal altruism among members of species who do not have the same genes was developed by Trivers in 1971. This point of view contends that individuals within a species aid one another in exchange for assistance in the future. George Williams, an evolutionary scientist, disagreed and believed that moral issues, such as assisting others, evolved accidentally during the course of development. However, Flack and De Waal (2000) disputed this theory, questioning why evolution would keep making the same error or mistake if moral difficulties had developed accidently. In addition, Flack and De Waal (2000) argued that studying how animals behave in their social groups is crucial for understanding moral behaviours that have persisted throughout evolution since they may be important for the social group.

Waal (2013) asserts that primates utilise negotiating strategies and soothe one another to settle disputes. Waal (2008) argued, more precisely, that apes can comfort and cuddle their infants to express their empathy for them. In a similar line, Mendes et al. (2018) discovered that chimpanzees can distinguish between prosocial and antisocial behaviour because they pay more attention to scenes in which the latter is penalised.

In conclusion, genetic influences and reciprocal altruism are among the biological underpinnings of prosocial behaviour (Dugatkin, 1997; Warneken ve Tomasello, 2009). However, maintaining the social group, particularly in primates, might be linked to sentiments of sympathy and helpfulness (Waal, 2013).

Rationale of the Study

Prosocial thoughts and behaviours are characterised as a sense of responsibility for other people, as well as a greater possibility of experiencing empathy both emotionally and intellectually. Prosocial development and early experimental approaches show how prosocial behaviour may be influenced by biological, moral, and emotional perspectives. It is critical to understand these various perspectives of prosocial behaviour in order to identify and adapt methods of strengthening such behaviour. This information can then be used to further develop training plans and interventions in various areas such as the educational sector, criminal facilities, hospital settings etc.

METHODOLOGY

Aim

To understand prosocial behaviours from multiple perspectives.

Method:

The current study employed the secondary research methodology, which involves combining existing data gathered from a range of sources, including external sources (such as government

statistics, organisational bodies, and the internet) to access published datasets, reports, and survey results.

To improve the overall efficacy of the research, existing data was collected and summarised.

Search strategies

The systematic search was done in the APA database using Google Scholar and Scopus Indexed Journals. The keywords used were "(perspectives and theories) AND (pro social behaviour)." The publication time ranged from 1971 to 2012.

Inclusive Criteria

The articles which were related to pro social behaviour in either of the three perspectives and were published in a reliable journal were taken into consideration:

- 1. Moral Perspective of prosocial behaviour
- 2. Emotional Perspective of prosocial behaviour
- 3. Biological perspective of prosocial behaviour

DISCUSSION

Understanding prosocial behaviour from a biological, moral, and emotional standpoint was the goal of this study. Although Latané and Darley (1968) demonstrated in their seminal work that the distribution of responsibility has an impact on helping behaviour, prosocial behaviour research is not just exclusive to cultural psychology.

According to studies involving non-human animals, helping behaviours are correlated with reciprocal altruism and genetic resemblance from a biological perspective (Dugatkin, 1997). Similar to how Waal (2008) hypothesised that apes can exhibit empathetic feelings, Mendes et al. (2018) discovered that chimpanzees can distinguish between prosocial and antisocial behaviour.

Affective, cognitive, and behavioural aspects all contribute to morality (Shaer, 2009). Because they are intended to benefit others and the welfare of society, prosocial acts can be thought of as moral actions (Penner, Dovidio, Piliavin, & Schroeder, 2005). Theories by Piaget and Kohlberg that take a cognitive approach to morality often place a strong emphasis on moral reasoning, which includes the decision-making process about the moral behaviour of the individual. However, these views are thought to place a greater emphasis on laws and justice. Researchers created a measure that includes the hedonistic, needs-oriented, approbation, empathic, and internalised stages of prosocial moral reasoning to better understand the thinking behind prosocial activities (Eisenberg, Lennon, & Roth, 1983). As a result, advanced prosocial moral thinking has been linked to helpful activities (Eisenberg et al., 2014). Helpful acts are linked to moral identity, which is denied as a representation of internalised moral ideals, in addition to prosocial moral reasoning (Johnston & Krettenauer, 2011).

According to Blasi (2004), moral behaviour is linked to not only cognitive processes but also to a person's personality. As a result, the internalisation of moral principles into a person's self-schema caused that person to act in accordance with that self-schema. Studies revealed a connection between internalising moral identity features and prosocial conduct (Aquino and Reed, 2002; Hardy, Bean, & Olsen, 2015). Prosocial behaviours are associated with emotions in addition to moral reasoning and moral identity. Prosocial behaviours were studied in developmental psychology in relation to emotional control abilities, empathy, sympathy, and guilt sentiments (Eisenberg, 2000). However, in this review, prosocial conduct was

investigated in relation to guilt emotions. Because they entail an evaluative process and motivate people to act morally, guilt feelings are categorised as moral emotions (Haidt, 2003).

Feelings of guilt are categorised as both a self-conscious emotion and a moral emotion (Tracy & Robins, 2004). When people feel guilty, according to Cialdini et al. (1982), they want to get rid of this unpleasant emotion (as cited in Bierho, 2002). Helping behaviours therefore give the person an opportunity to overcome this negative by making up for their bad behaviour. Studies revealed a connection between the emotion of guilt and prosocial conduct (De Hooge, 2008; De Hooge, Zeelenberg and Breugelmans, 2007; Ketelaar and Au, 2003).

According to the general understanding and analysis of the material gathered, prosocial behaviour is thought to result from three distinct views, including moral, emotional, and biological orientations. However, as the research cited does not take into account the impact of culture on one's moral behaviour, there is a substantial information vacuum in terms of the moral perspective of prosocial behaviour. Furthermore, there are very few to no Indian research that could be done to better understand the nature of these perspectives in various contexts. All the studies that could be done were based on the understanding of western culture.

CONCLUSION

Prosocial behaviour is studied in economics, sociology, biology, and other fields in addition to psychological literature. It was acknowledged that prosocial behaviour plays a crucial role in a person's life since it serves as the cornerstone for social involvement in the outside world. The goal of this study was to understand the various viewpoints on prosocial behaviour. It has been demonstrated that three major perspectives can help us understand prosocial behaviour in great part. These viewpoints demonstrate the biological roots of prosocial behaviour and show that it is not just a trait of humans. Guilt is emphasised as a basis of prosocial behaviour in emotional roots. Finally, prosocial behaviour can include moral and emotional underpinnings, such as social learning and moral reasoning.

Recommendation Strategies and Conclusion

In this review, prosocial behaviours were tried to explain in terms of biological, moral and emotional perspectives. It is thought that future studies may examine the prosocial behaviours in relation with the cultural influences on an individual especially in the Indian context. So, after this study, some researches can be undertaken to assess the cultural factors which influence the prosocial behaviour, identify the origin of the prosocial behaviour in the Indian context, study the role of the family and school environment of a collectivistic society like India, in developing prosocial behaviour.

Future Implications

Prosocial ideas and behaviours are defined by a feeling of responsibility for others, as well as a better emotional and intellectual capacity for empathy. Prosocial development and early experimental methodologies demonstrate how biological, moral, and emotional views can impact prosocial behaviour. Understanding these varied viewpoints on prosocial behaviour is necessary in order to find and modify techniques of increasing such behaviour.

This information may then be utilised to act as a source of further research on this, as this field of research is highly fruitful and beneficial and there are several opportunities for study in this area. Also, the information collected from such research can assist in designing additional

training programs and interventions in sectors such as the educational sector, penal facilities, and so on.

By putting social skills education and role-modelling programmes into place, these places can encourage prosocial behaviour. Teachers might provide a multicultural environment where everyone can observe prosocial behaviour.

REFERENCES

- Aquino, K., & Reed II, A. (2002). e self-importance of moral identity. Journal of personality and social psychology, 83(6), 1423-1440.
- Attar-Schwartz, S., Tan, J. P., Buchanan, A., Flouri, E., & Griggs, J. (2009). Grandparenting and adolescent adjustment in two-parent biological, lone-parent, and step-families. Journal of family psychology, 23(1), 67-75.
- Balish, S. M., Rainham, D., & Blanchard, C. (2015). Community size and sport participation across 22 countries. Scandinavian journal of medicine & science in sports, 25(6), e576-581. Bandura, A. (1978). e self-system in reciprocal determinism. American psychologist, 33(4), 344-358.
- Batson, D. & Powell, A. (2003). Altruism and Prosocial Behavior. In T. Millon & M.J. Lerner (Eds) Handbook of Psychology, Personality and Social Psychology, vol. 5, s. 463-479). New York, Wiley.
- Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1994). Guilt: an interpersonal approach. Psychological bulletin, 115(2), 243-267, Bierho, H. W. (2002). Prosocial behaviour. Hove, UK: Psychology.
- Blasi, A. (2004). Moral functioning: Moral understanding and personality. Moral development, self, and identity, 335-347.
- Bronfenbrenner, U. (1979). e ecology of human development: Experiments by nature and design. Cambridge, MA: Harvard University Press.
- Bronfenbrenner, U., & Morris, P. A. (2006). Bioecological model of human development. In R. M. Lerner & W. Damon (Eds.), Handbook of child psychology: Vol. 1. Theoretical models of human development, 793–828). Hoboken, Wiley.
- Carlo, G., Eisenberg, N., & Knight, G. P. (1992). An objective measure of adolescents' prosocial moral reasoning. Journal of Research on Adolescence, 2(4), 331-349.
- Davidov, M., & Grusec, J. E. (2006). Untangling the links of parental responsiveness to distress and warmth to child outcomes. Child Development, 77, 44–58.
- Davis, M. H., & Franzoi, S. L. (1991). Stability and change in adolescent self-consciousness and empathy. Journal of Research in Personality, 25(1), 70-87.
- Decety, J., Michalska, K. J., & Kinzler, K. D. (2012). e contribution of emotion and cognition to moral sensitivity: a neurodevelopmental study. Cerebral Cortex, 22(1), 209-220.
- De Hooge, I. E. (2012). Exemplary social emotion guilt: Not so relationship-oriented when another person repairs for you. Cognition & emotion, 26(7), 1189-1207.
- De Waal, F. (2008). İçimizdeki Maymun, Çeviri: Aslı Biçen, Metis Yayınevi, İstanbul.
- De Waal, F. (2013). Köken Ağacı, Çeviri: Dilek Eylül Dizdaroğlu, Alfa Yayınevi, İstanbul.
- Dugatkin, L. (1997). e evolution of cooperation. Bioscience, 47, 355-363.
- Eisenberg, N. (2000). Emotion, regulation, and moral development. Annual review of psychology,51(1), 665-697.
- Flack, J. C., & De Waal, F. B. (2000). 'Any animal whatever'. Darwinian building blocks of morality in monkeys and apes. Journal of Consciousness Studies, 7(1-2), 1-29.
- Frensch, K. M., Pratt, M. W., & Norris, J. E. (2007). Foundations of generativity: Personal and family correlates of emerging adults' generative life-story themes. Journal of Research in Personality, 41(1), 45-62.

© The International Journal of Indian Psychology, ISSN 2348-5396 (e) | ISSN: 2349-3429 (p) | 1854

- Gorrell J., McAdam A., Coltman D., Humphries M. & Boutin S. (2010). Adopting kin enhances inclusiveness in asocial red squirrels. Nature Communications 1, 22-26.
- Haidt, J. (2003). The emotional dog does learn new tricks: A reply to Pizarro and Bloom (2003) Hamilton, W. D. (1964). e genetical evolution of social behaviour. II. Journal of theoretical biology, 7(1), 17-52.
- Hardy, S. A. (2006). Identity, reasoning, and emotion: An empirical comparison of three sources of moral motivation. Motivation and Emotion, 30, 207-213.
- Helwig, C. & Truiel, E. (2011). Children's Social and Moral Reasoning. In Smith, P. & Hart, C. e Wiley-Blackwell Handbook of Childhood Social Development (2nd eds)., 567-584.
- Holmgren, R. A., Eisenberg, N., & Fabes, R. A. (1998). Relations of children's Situational empathy-related emotions to dispositional prosocial behaviour. International Journal of Behavioral Development, 22(1), 169-193.
- Johnston, M., & Krettenauer, T. (2011). Moral self and moral emotion expectancies as predictors of anti-and prosocial behaviour in adolescence: A case for meditation?. European Journal of developmental psychology, 8(2), 228-243
- Keith, J. G., Nelson, C. S., Schlabach, J. H., & thompson, C. J. (1990). e relationship between parental employment and three measures of early adolescent responsibility: Familyrelated, personal, and social. Journal of Early Adolescence, 10, 399-415.
- Ketelaar, T., & Au, W. T. (2003). Aspects of guilt on the behaviour of uncooperative individuals in repeated social bargaining games: An act-as-information interpretation of the role of emotion in social interaction. Cognition & Emotion, 17, 429-453.
- Knight, G. P., Bernal, M., & Carlo, G. (1993). Socialisation and the development of cooperative, competitive, and individualistic behaviours among Mexican American children. Hispanic Journal of Behavioral Sciences, 15, 291-309.
- Kochanska, G., Gross, J. N., Lin, M., & Nichols, K. E. (2002). Guilt in young children: Development, Determinants, and relations with a broader system of standards. Child Development, 73, 461–482.
- Latané, B., & Darley, J. M. (1968). Group inhibition of bystander intervention. Journal Of Personality and Social Psychology, 10, 215-221.
- Lewis, M., Sullivan, M. W., Stanger, C., & Weiss, M. (1989). Self-development and selfconscious emotions. Child development, 146-156.
- Mendes, N., Steinbeis, N., Bueno-Guerra, N., Call, J., & Singer, T. (2017). Preschool children and chimpanzees incur costs to watch punishment of antisocial others. Nature Human Behaviour, 2, 45-51.
- Miller, J. G., Kahle, S., & Hastings, P. D. (2015). Roots and benets of costly giving: Children who are more altruistic have greater autonomic exibility and less family wealth. Psychological Science, 26(7), 1038-1045.
- Paus, T. (2005). Mapping brain maturation and cognitive development during adolescence. Trends in cognitive sciences, 9(2), 60-68.
- Penner, L., Dovidio, J., Piliavin, J. & Schroeder, D. (2005). Prosocial Behavior: Multilevel Perspectives, Annual Review of Psychology, 56, 14-28.
- Rheingold, H. L. (1982). Little children's participation in the work of adults, a nascent prosocial behaviour. Child Development, 114-125.
- Romano, E., Tremblay, R. E., Boulerice, B., & Swisher, R. (2005). Multilevel correlates of childhood physical aggression and prosocial behaviour. Journal of Abnormal Child Psychology, 33, 565-578, doi:10.1007/s10802-005-6738-3.
- Selman, R. L. (1973). A Structural Analysis of the Ability to Take Another's Social Perspective: Stages in the Development of Role-Taking Ability.

- Shaer, D. R. (2009). Social and Personality Development (6th ed). Belmont, CA: Wadsworth Cengage Learning. Sloane, S., Baillargeon, R., & Premack, D. (2012). Do infants have a sense of fairness? Psychological science, 23(2), 196-204.
- Strand, P. S., Pula, K., & Downs, A. (2015). Social values and preschool behavioural adjustment: A comparative investigation of Latino and European American preschool children. Cultural Diversity and Ethnic Minority Psychology, 21(3), 400-408.
- Tangney, J. P., Miller, R. S., Flicker, L., & Barlow, D. H. (1996). Are shame, guilt, and embarrassment distinct emotions? Journal of Personality and Social Psychology, 70, 1256–1269.
- Taylor, Z. E., Eisenberg, N., Spinrad, T. L., Eggum, N. D., & Sulik, M. J. (2013).
- Tracy, J. L., & Robins, R. W. (2004). Putting the self into self-conscious emotions: theoretical model. Psychological Inquiry, 15, 103–125.
- Tracy, J. L., Robins, R. W., & Tangney, J. P. (Eds.). (2007). e self-conscious emotions: theory and research. Guilford Press. Trivers, R. L. (1971). e evolution of reciprocal altruism. e Quarterly review of biology, 46(1), 35-57.
- Warneken, F. & Tomasello, M. (2009). e roots of human altruism. British Journal of Psychology, 100, 455–471
- Williams, G. C. (1988). Huxley's evolution and ethics in sociobiological perspective, Zygon, 23(4), 383-407.
- Williamson, R. A., Donohue, M. R., & Tully, E. C. (2013). Learning how to help others: Twoyear-olds' social learning of a prosocial act. Journal of experimental child psychology, 114(4), 543-550.
- Vaish, A., Carpenter, M., & Tomasello, M. (2009). Sympathy through affective perspective taking and its relation to prosocial behaviour in toddlers. Developmental psychology, 45(2), 534-543.
- Van der Graaf, J., Branje, S., De Wied, M., Hawk, S., Van Lier, P., & Meeus, W. (2014). Perspective taking and empathic concern in adolescence: Gender differences in developmental changes. Developmental Psychology, 50(3),881-888.
- Zahn-Waxler, C., Radke-Yarrow, M., & King, R. A. (1979). Child rearing and children's prosocial initiations toward victims of distress. Child Development, 50, 319-330

Acknowledgement

The author(s) appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interest

The author(s) declared no conflict of interest.

How to cite this article: Kapur, S., Parihar, L. & Kaistha, S. (2023). Pro-Social Behaviour: Biological, Moral and Emotional Perspectives. *International Journal of Indian Psychology*, *11(1)*, 1846-1856. DIP:18.01.186.20231101, DOI:10.25215/1101.186